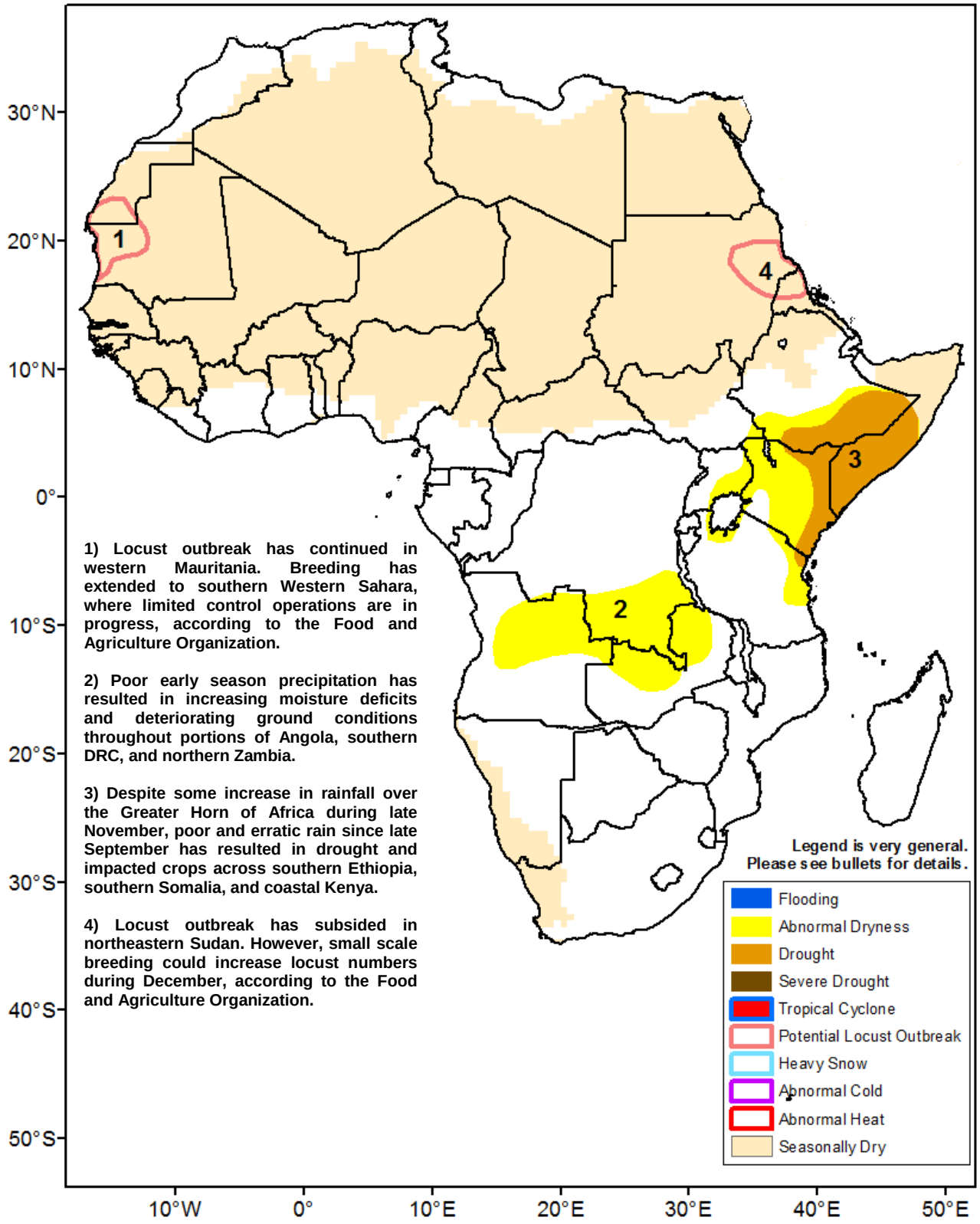
Climate Prediction Center's Africa Hazards Outlook
December 8 – 14, 2016

- **Limited and below-average rain observed throughout Southern Africa during the past period.**
- **The October-December rainfall season coming to an end in the Greater Horn of Africa.**



1) Locust outbreak has continued in western Mauritania. Breeding has extended to southern Western Sahara, where limited control operations are in progress, according to the Food and Agriculture Organization.

2) Poor early season precipitation has resulted in increasing moisture deficits and deteriorating ground conditions throughout portions of Angola, southern DRC, and northern Zambia.

3) Despite some increase in rainfall over the Greater Horn of Africa during late November, poor and erratic rain since late September has resulted in drought and impacted crops across southern Ethiopia, southern Somalia, and coastal Kenya.

4) Locust outbreak has subsided in northeastern Sudan. However, small scale breeding could increase locust numbers during December, according to the Food and Agriculture Organization.

Poor rain accumulated in northern Southern Africa.

From November 30 - December 6, a decrease in rainfall was observed over Southern Africa relative to the weekly rain accumulation of the previous period. While moderate to locally heavy rain fell over Angola, DRC, northeastern Zambia, portions of northern Mozambique, and northern Madagascar, light to no rain was recorded elsewhere (**Figure 1**). This past week's rain was mostly below-average and contributed to the maintaining of thirty-day moisture deficits across the northern portions of Southern Africa, including Angola, southern DRC, and northern Zambia. .

Since the beginning of October, northern Angola, much of DRC, and northern Zambia have received insufficient rain due to a delayed onset of the season and uneven distribution of rainfall. Seasonal deficits have ranged from 50-100 mm across these dry portions of Southern Africa (**Figure 2**). The lack of rain has already negatively impacted biomass conditions over localized areas of northern Angola and southern DRC, based on some vegetation indices. In contrast, south-central Angola, north-central Namibia, Botswana, north-central South Africa, and central Madagascar have accumulated above-average rain. The continuation of the Southern African monsoon rain is expected to improve conditions over many local areas of the region.

During the next outlook period, increased rain is forecast over Southern Africa. Heavy downpours are expected across Angola, southern DRC, Zambia, and western Tanzania. The forecast enhanced rain should help mitigate dryness in the region. Farther south, moderate to heavy rain is also expected in northeastern Namibia, northern Botswana, Zimbabwe, and eastern South Africa. In contrast, light rain is forecast elsewhere.

Insufficient rain has led to drought in the Greater Horn.

An analysis of the accumulated rain since the beginning of the *Short-Rains*, October-December, rainfall season has indicated a poor rainfall performance over the Greater Horn of Africa. Significant, seasonal deficits have prevailed in southern Ethiopia, southern and central Somalia, and eastern Kenya, where negative anomalies have ranged between 50-100 mm (**Figure 3**). Despite some increase in rain has been observed over some areas over the past few weeks, the delayed onset of the season, combined with an erratic rainfall distribution has already negatively impacted crops and resulted in drought across the region. As the season has already ended over some areas such as central Somalia, recovery is unlikely. During the next outlook period, limited but seasonable rain is forecast over Eastern Africa, with rain amounts below 10 mm over southern Ethiopia and parts of southern Somalia. Farther south, light to moderate rain is possible over central and eastern Kenya. Though the forecast rain will not be sufficient to eliminate accumulated deficits, continuous rain may improve water availability and pastoral conditions over some local areas.

Satellite-Estimated Rainfall (mm)
Valid: November 30 – December 06, 2016

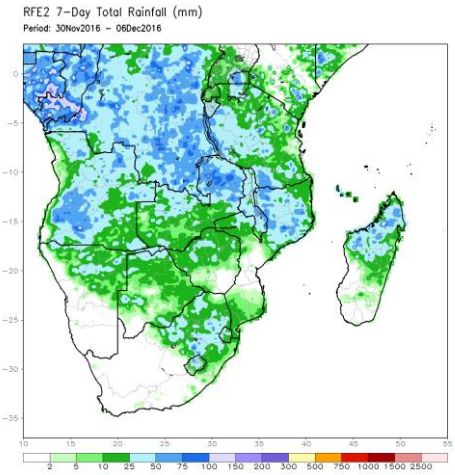


Figure 1: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm)
Valid: October 01 – December 06, 2016

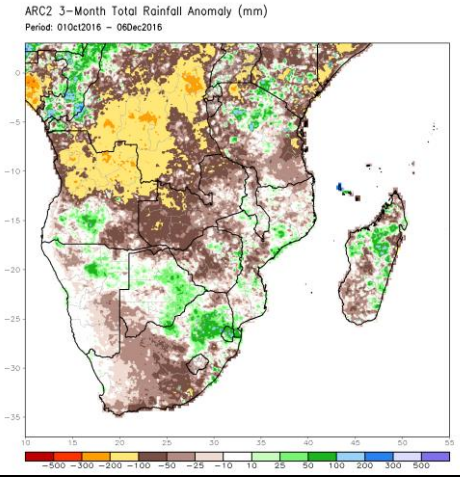


Figure 2: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm)
Valid: October 01 – December 06, 2016

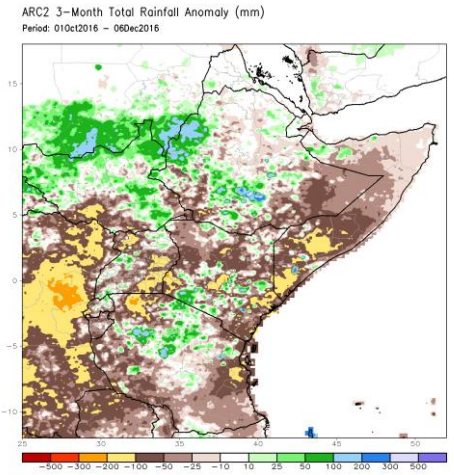


Figure 3: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.